

Cephalosporin anti-
Platenolide synthase

ALIGNMENTS

[illegible]

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PI Sgoures D N:
DR WPI: 97-043139/04.
DR P-BSDB: M07700.
PT New DNA encoding ETS2 repressor factor - useful for reducing
PT tumourigenicity, esp. oncogene associated tumour cells
PS Claim 3: Page 63-65; 101pp: English.
CS A cDNA clone (747198) codes for human ETS2 repressor factor (ERF)
CG (M07700). It was isolated from a K562 cDNA library using the H1
CC site of the ETS2 promoter as probe. A related clone (747199)
CC coding for an alternatively spliced ERF (M07701) was also isolated.
CC The ERF gene, which maps to chromosome 19, q1.2-1.3, is the first
CC member of the ets family to be identified as a transcriptional
CC repressor in mammalian cells. It can be used to suppress or repress
CC transcription and to elucidate transcription process and regulation.
CC The ERF gene also has tumour suppressor activity and can be used to
CC reduce ets-dependent tumourigenicity associated with v-mos, c-met,
CC tpv-met, Ha-ras and gag-myb-ets oncogenes. The cDNA can be cloned
CC for expression of the ERF polypeptide in host cells.
SQ Sequence 2667 BP: 456 A; 876 C; 825 G; 510 T;

Query Match 4.18; Score 78.4; DB 1; Length 2667;
Best Local Similarity 59.88; Pred. No. 1.3e-07;
Matches 152; Conservative 0; Mismatches 96; Indels 6; Gaps

QY 1124 gacagcgagtgagtcatactcgtccgagcgacccatccacctgtggcaggtctcctaag 1183
DB 165 GCCCTACAGCCAGAGTGCTGCCCTCGCTCAAGGAGATCCAGCGCTGACCTTATCTCG 224
QY 1184 gagttgactcaagcccccacagctatgcgcgtctcattagtgatgcacaagaagagaag 1243
DB 225 GAGCTGCTGCGGAAGAGAGAGTACCAAGCGCGCTATTTCCTCGCAGGGGAGACTACGGGAA 264
QY 1244 ggcacattcaaaatttgagactcagccacaggtggccgagctgtgtaggcatacgcaagaac 1303
DB 285 TTCGTCATCAAA-----GACCCCTGATGAGATGTGGCCCGCGCTGTGGGCGCTTCCCAACTGC 338
QY 1304 cgtccgcagtaactcagacaagctcgaagcgcgtccatccatccgcagatcttcaagaagggc 1363
DB 339 AAGGCCCAGAGAAATTACGACAACTGATGCGGGGCCCTGTGGCTATTACTATCAACAAGCGC 398
QY 1364 atcatccgaagc 1377
DB 399 ATTCTGCACAAAGAC 412

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RESULT      2
ID V38354 standard; cDNA: 1116 BP.
AC V38354:
DT 09-NOV-1998 (first entry)
DE Transcription factor ESX gene open reading frame.
KW ESX; epithelial-restricted with serine box; transcription factor;
KW ETS; human; epithelial cancer; breast cancer; adenocarcinoma;
KW diagnosis; therapy; ss.
OS Homo sapiens.
FH Key Location/Qualifiers
FT exon 1..163
FT FT /*tag= a
FT FT /number= 2
FT FT 164..385
FT FT /*tag= b
FT FT /number= 3
FT FT 386..478
FT FT /*tag= c
FT FT /number= 3
FT FT 479..688
FT FT /*tag= d
FT FT /number= 5
FT FT 689..805
FT FT /*tag= e
FT FT /number= 6
FT FT 806..1001
FT FT /*tag= f
FT FT /number= 8
FT FT 1002..1111
FT FT /*tag= g
FT FT /number= 9
FT FT 1..189
FT FT /*tag= h
FT FT /product= first variable region
FT FT /note= "Claim 28"
FT FT 190..309
FT FT /*tag= i
FT FT /product= pointed region
FT FT 310..361
FT FT /*tag= j
FT FT /product= second variable region
FT FT /note= "Claim 8"
FT FT 562..714
FT FT /*tag= k
FT FT /product= serine-rich region
FT FT 715..819
FT FT /*tag= l
FT FT /product= third variable region
FT FT /note= "Claim 28"
FT FT 820..1062
FT FT /*tag= m
FT FT /product= Ets DNA binding domain
FT FT 1063..1113
FT FT /*tag= n
FT FT /product= fourth variable region
FT FT /note= "Claim 28"

W09823782-A2.
PD 04-JUN-1998.
PF 26-NOV-1997; U21865.
PR 25-NOV-1997; US-031504.
PA (REGC ) UNIV CALIFORNIA.
PI Benz CC, Chang C, Scott GK.
PI WPI: 98-322755/28.
P-PSDB: W60677-79.
FT Nucleic acid encoding the ESX transcription activator.
FT over-expressed in epithelial, especially breast, cancers, also
FT related polypeptide(s), antibodies, vectors and transformed cells.
FT useful for diagnosis and treatment of cancer
PS Claim 3, Fig 1, 120pp, English.
CC This is the open reading frame of the newly isolated ETS gene that
CC codes for a novel transcription factor (see W60677) associated

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CC With the aetiology of cancers, including epithelial cancers.
CC The gene is a member of the ETS family and is designated ETS for
CC epithelial-restricted with serine box. The gene is located at
CC chromosome 1q32, a region amplified in 50% of early breast cancers.
CC ESX is an early indicator of breast cancer, being expressed at the
CC ductal carcinoma in situ stage. Dysfunction of the ESX gene that
CC results in increased expression is indicative of epithelial cancer
CC (especially breast cancer but also gastric, ovarian and lung
CC adenocarcinoma) and of unfavourable prognosis. The ESX open
CC reading frame was deduced from a cDNA clone of foetal liver-spleen
CC origin that was identified in an expressed sequence tag database
CC search using human Ets-2, and from a clone obtained by 5'RACE of
CC placental polyA mRNA. Antibodies, antisense nucleic acids or
CC inactive ESX mutant proteins that inhibit activity of ESX can be
CC used to inhibit growth and proliferation of neoplastic cells,
CC particularly cancer. ESX polypeptides, polynucleotides and
CC antibodies are also used to detect ESX, particularly for diagnosis
CC and monitoring of cancer. Polynucleotides may also be used to
CC detect gross abnormalities in chromosome 1, e.g. for in vitro
CC screening for predisposition to cancer, and to generate ESX protein
CC in vivo from gene therapy vectors. ESX protein, genes and cDNA
CC can also be used to screen for specific modulators, especially
CC potential anticancer agents.
CC Sequence 1116 BP; 255 A; 322 C; 335 G; 204 T;
SQ

Query Match 4.1%; Score 78.2; DB 1; Length 1116;
Best Local Similarity 59.8%; Pred. No. 1.2e-07;
Matches 150; Conservative 0; Mismatches 98; Indels 3; Gaps 1;

QY 1159 catccacctgtgagcttcctcaagagagctgctactcaagccacagcagtcgcccctt 1218
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 816 CACCCACCTGTGGAGGATTCATCCGGGACATCTCATCCACCGGAGCTCACAGGGCCT 875

QY 1219 cataggtgctcaacaagaagaagagcattcaaatgtgaagactcagccaggtggc 1278
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 876 CATGAAGTGGAGAAATGGCATGAAGCGCTTCATCAAGTTCCTCGCTCCAGGCTGTGGC 935

QY 1279 ccgagctgtgggcatccgcgaagaccgtccgcgcatgaactagacaagcttggccgcc 1338
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 936 CCAACTATGGGGCCAAAGAAAAGAAACGACACATGACTTACGAGAGCTGAGCGGGC 995

QY 1339 catccgcagtatctcaagaagaagcattcatcgcgaagccagacattccagcgcctgt 1398
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 996 CATGAG---GTACTACTACAAACGGAGATCTGTGAAGGGGTGAGTGGCGGAGACTCCT 1052

QY 1399 ctaccagcttcg 1409
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1053 CTMCAGTTTG 1063

RESULT      3
ID V38355 standard; cDNA: 1907 BP.
AC V38355:
DT 09-NOV-1998 (first entry)
DE Transcription factor ESX cDNA (ORF and untranslated regions).
KW ESX; epithelial-restricted with serine box; transcription factor;
KW ETS; human; epithelial cancer; breast cancer; adenocarcinoma;
KW diagnosis; therapy; ss.
OS Homo sapiens.
FH Key Location/Qualifiers
FT 5'UTR 1..95
FT FT /*tag= a
FT FT 96..1206
FT FT /*tag= b
FT FT /note= "Claim 3"
FT FT 1207..1907
FT FT /*tag= c

W09823782-A2.
PD 04-JUN-1998.
PF 26-NOV-1997; U21865.
PR 25-NOV-1997; US-031504.

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FT      Intron      5143..5284
FT      /tag= n
FT      /number= 6
FT      exon        5285..5402
FT      /tag= O
FT      /number= 7
FT      Intron      5403..6255
FT      /tag= P
FT      /number= 7
FT      exon        6256..6450
FT      /tag= 9
FT      /number= 8
FT      Intron      6451..6998
FT      /tag= r
FT      /number= 8
FT      exon        6999..7115
FT      /tag= S
FT      /number= 9
FT      /number= 9
PN      WO9823782-A2.
PD      04-JUN-1998.
PR      26-NOV-1997: U21865.
PR      25-NOV-1997: US-031504.
PR      27-NOV-1996: US-031504.
PA      (REGC ) UNIV CALIFORNIA.
PI      Benz CC, Chang C, Scott GK;
PI      WPI: 98-322755/28.
DR      P-PEDB: W60680.
PT      Nucleic acid encoding the ESX transcription activator -
PT      over-expressed in epithelial, especially breast, cancers, also
PT      related polypeptide(s), antibodies, vectors and transformed cells,
PS      Claim 18: Page 85-90; 120pp: English.
CC      This is the murine MEX1 gene that contains about 2.9 kb of
CC      promoter upstream of about 4.9 kb of DNA incorporating at least
CC      9 exons that specify a transcript of about 2 kb, with exons 2-9
CC      encoding the 371-amino acid MEX1 protein (see W60680). The gene
CC      is a member of the ETS family and is designated ETV for
CC      epithelial-restricted with serine box. In humans, a dysfunction of
CC      the ETV gene (see V18354) that results in increased expression is
CC      indicative of epithelial cancer (especially breast cancer but
CC      also gastric, ovarian and lung adenocarcinoma) and of unfavourable
CC      prognosis. Antibodies, antisense nucleic acids or inactive ESX
CC      mutant proteins that inhibit activity of human ESX can be used to
CC      inhibit growth and proliferation of neoplastic cells, particularly
CC      cancer. ESX polypeptides, polynucleotides and antibodies are also
CC      used to detect ESX, particularly for diagnosis and monitoring of
CC      cancer. They can also be used to screen for specific modulators,
CC      especially potential anticancer agents. Transgenic animals are
CC      also provided.
SQ      Sequence 7752 BP: 1768 A; 2050 C; 2019 G; 1914 T;

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Query Match 3.6%; Score 68.6; DB 1; Length 7752;

Best Local Similarity 61.5%; Pred. No. 1.4e-05;

Matches 110; Conservative 0; Mismatches 69; Indels 0; Gaps 0;

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OY      1163 caccctgtgagcttctcctcaaggaggtgtctactcaagcccaagcgtatgcccgtcatt 1222
DB      6271 CACCTGTGGAGTTATCCGAGCATCTTAATCCACCCGAGCTCAACGAAGCCCTCAAG 6330
OY      1223 aggtggtcaacaagaagagggcatcttcaaaatcgaagactcagcccaagtggtccgg 1282
DB      6331 AAGTGGAGAACCGGACACGAGGTGTGTTCAAGTTCTTCGCTCAAGAGCCGCGCCAA 6390
OY      1283 ctgtgggagcatcgcaagaacgctccgcgcactgaactacagacagctggcgctccat 1341
DB      6391 CCTGTGGGCCAGAAAGAAAGAACACCAATGACTATAGAGAACTGAGCCGAGCCAT 6449

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RESULT 12
V58521/c
ID V58521 standard; cDNA: 852 BP.
AC V58521;

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DT      08-DEC-1998 (first entry)
DE      Prostate tumour specific gene clone p18.
KW      Prostate tumour specific gene; human; prostate cancer; detection;
KW      therapy; ss.
OS      Homo sapiens.
PN      WO9837418-A2.
PD      27-AUG-1998.
PR      25-FEB-1998: U03690.
PR      09-FEB-1998: US-904809.
PR      25-FEB-1997: US-806596.
PR      01-AUG-1997: US-904809.
PA      (CORI ) CORIXA CORP.
PI      Dillon DC, Xu J;
PI      WPI: 98-480805/41.
DR      P-PEDB: W60680.
PT      Novel human prostate specific tumour protein and fragments - useful
PT      for detecting and treating prostate cancers
PS      Claim 1: Page 55; 141pp: English.
CC      This sequence represents a human prostate tumour specific gene, and can
CC      be used in the method of the invention. The method is for detecting
CC      prostate cancer comprises contacting a biological sample with an agent
CC      able to bind an immunogenic portion of a prostate protein (such as
CC      encoded by this sequence). An antibody which binds to an immunogenic
CC      portion of the prostate protein, and the method can be used to detect,
CC      monitor progression of, or treat prostate cancers. The antibody may
CC      also be conjugated to a therapeutic agent for use in therapy of prostate
CC      cancers.
SQ      Sequence 852 BP: 174 A; 195 C; 206 G; 274 T;

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Query Match 3.2%; Score 60.6; DB 1; Length 852;

Best Local Similarity 56.2%; Pred. No. 0.00043;

Matches 114; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

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OY      1163 caccctgtgagcttctcctcaaggaggtgtctactcaagcccaagcgtatgcccgtcatt 1222
DB      388 CACCTATGGAATTTATCCGAGCATCTTGAACCCAGAACAGCCAGATTATTA 329
OY      1223 aggtggtcaacaagaagagggcatcttcaaaatcgaagactcagcccaagtggtccgg 1282
DB      328 AATGCGAAGACCGATCGAGGCGCTCTTCAGGTTCTTGAATCAGAGCGAGTGCTCAG 269
OY      1283 ctgtgggagcatcgcaagaacgctccgcgcactgaactcagacagctgagccgctccat 1342
DB      268 CTATGGGTAAATAAGAAAGAACAGACATGACCTATGAAAAGCTCAGCCGAGCTATG 209
OY      1343 cgcagctattacaagaagagcatt 1365
DB      208 AGATATTACTACAAAGAGAAAT 186

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RESULT 13

ID V61167/c

AC V61167;

DT 06-JAN-1999 (first entry)

DE cDNA sequence of prostate tumour clone p18.

KW Prostate; cancer; tumour; vaccine; immunogen; clone; ss.

OS Homo sapiens.

PN WO9837093-A2.

PD 27-AUG-1998.

PR 25-FEB-1998: U03492.

PR 09-FEB-1998: US-020956.

PR 25-FEB-1997: US-806099.

PR 01-AUG-1997: US-904804.

PA (CORI) CORIXA CORP.

PI Dillon DC, Xu J;

PI WPI: 98-609886/51.

DR Poly peptides comprising immunogenic portions of prostate proteins -

PT used in a vaccine for the treatment of prostate cancer

PS Claim 3: Page 53; 130pp: English.

CC The present sequence is a new DNA which encodes an immunogenic portion

of a prostate tumour protein. The encoded immunogen, or the DNA itself,

can be used as a vaccine for the treatment of prostate cancer. The DNA

can be used as a vaccine for the treatment of prostate cancer. The DNA

CC was identified by analysis of a subtracted cDNA library obtained by
 CC subtracting a prostate tumour cDNA expression library with a normal
 CC tissue cDNA library.
 SQ Sequence 852 BP; 174 A; 195 C; 206 G; 274 T;

Query Match 3.2%; Score 60.6; DB 1; Length 852;
 Best Local Similarity 56.2%; Pred. No. 0.00043;
 Matches 114; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY 1163 caccctgtgcagttcctcgaagagtgtaactcaagcccaagctatgcccgttcatt 1222
 DB 388 CACTTATGGGAATTCATCCGCGACATCTCTTGAAACCCAGACAGAACCCAGATTATA 329
 QY 1223 aggtgtcacaagaagaaggagcattcacaattgagagctcagccaggtgcccgg 1282
 DB 328 AATGGGAGACCGATCTAGAGGCGCTCTTCAGATTCTTAAATCAAGAGCAGTGCCTCAG 269
 QY 1283 ctgtgggcatccgcagaagacgctccgcagtaactagacaagctgagccgtccatc 1342
 DB 266 CTATGGGGTAAAGAAAGAAACAGACAGCATGACTATGAAAGCTCAGCCGACTAAG 209
 QY 1343 cccagctattacaagaagcgcat 1365
 DB 208 AGATTATTACTACAAAGAGAAAT 186

RESULT 14

V15529 standard; cDNA; 2975 BP.
 AC V15529; 1998 (first entry)
 DE Human lymphoid-specific transcription factor NERF-1 cDNA.
 KW ets-related; human; lymphoid-specific transcription factor; NERF-1;
 OS Homo sapiens.
 FH Key Location/Qualifiers
 FT CDS 122..1687
 FT /tag= a
 FT /product= NERF-1

PM US5721113-A.
 PD 24-FEB-1998.
 PF 03-JAN-1995; 368281.
 PR 03-JAN-1995; US-368281.
 PA (HUMA-) HUMAN GENOME SCI INC.
 PI Kunsch CA, Libermann TA, Oettingen JP;
 DR WPI; 98-168405/15.
 DR P-PSDB; W47237.
 PT NERF-1 and NERF-2 nucleic acids - encode ets-related human
 PS lymphoid-specific transcription factors
 PS Claim 1; Columns 17-22; 17pp: English.
 CC The present sequence encodes the ets-related lymphoid-specific
 CC transcription factor NERF-1, which can be used in screening assays
 CC for drugs that modulate NERF activity, and to treat patients having
 CC need of NERF-1. ets-related factors are involved in, e.g. cancer
 CC development, retrovirus replication, T-cell cytokine production,
 CC cell cycle effects, growth regulation and cell differentiation.
 SQ Sequence 2975 BP; 958 A; 575 C; 614 G; 828 T;

Query Match 3.2%; Score 60.4; DB 1; Length 2975;
 Best Local Similarity 53.9%; Pred. No. 0.00056;
 Matches 124; Conservative 0; Mismatches 106; Indels 0; Gaps 0;

QY 1151 gggcagccatccacactgtgagctcctcaaggagtgtaactcaagcccaagctat 1210
 DB 518 GGAACACAAACCTATTGTGGAGTTCTTTAGATCTACTCAAGATAAATACTGT 577
 QY 1211 gggcgttcattagtggtcacaagaagaagcattcacaattgagactcagcc 1270
 DB 578 CCCAGGTATTATTAAATGACTCAGAGAGAAAAAGCATATTTCAGCTGGGATTCAAG 637
 QY 1271 caggtgcccggctgtggtgagcatccgcaagacgctcccgcaactagacaagctg 1330

DB 638 GCTGCTTAAAGCTTTGGGAAACCATAGAAACAAACCATGACATGAAACCATG 697
 QY 1331 agccgtccatccgcagattatcaagaaggagcattccgcgaagccaga 1380
 DB 698 GGACGAGCTTTGAGATACCTACTNCCAAAGGGAAATTTCTCCAAAGCTTGA 747

RESULT 15

V15530 standard; cDNA; 3240 BP.
 AC V15530;
 DE 22-MAY-1998 (first entry)
 DE Human lymphoid-specific transcription factor NERF-2 cDNA.
 KW ets-related; human; lymphoid-specific transcription factor; NERF-2;
 OS Homo sapiens.
 FH Key Location/Qualifiers
 FT CDS 207..1952
 FT /tag= a
 FT /product= NERF-2

PM US5721113-A.
 PD 24-FEB-1998.
 PF 03-JAN-1995; 368281.
 PR 03-JAN-1995; US-368281.
 PA (HUMA-) HUMAN GENOME SCI INC.
 PI Kunsch CA, Libermann TA, Oettingen JP;
 DR WPI; 98-168405/15.
 DR P-PSDB; W47238.
 PT NERF-1 and NERF-2 nucleic acids - encode ets-related human
 PT lymphoid-specific transcription factors
 PS Claim 2; Columns 23-28; 17pp: English.
 CC The present sequence encodes the ets-related lymphoid-specific
 CC transcription factor NERF-2, which can be used in screening assays
 CC for drugs that modulate NERF activity, and to treat patients having
 CC need of NERF-2. ets-related factors are involved in, e.g. cancer
 CC development, retrovirus replication, T-cell cytokine production,
 CC cell cycle effects, growth regulation and cell differentiation.
 SQ Sequence 3240 BP; 1070 A; 592 C; 662 G; 916 T;

Query Match 3.2%; Score 60.4; DB 1; Length 3240;
 Best Local Similarity 53.9%; Pred. No. 0.00057;
 Matches 124; Conservative 0; Mismatches 106; Indels 0; Gaps 0;

QY 1151 gggcagccatccacactgtgagctcctcaaggagtgtaactcaagcccaagctat 1210
 DB 783 GGAACACAAACCTATTGTGGAGTTCTTTAGATCTACTCAAGATAAATACTGT 842
 QY 1211 gggcgttcattagtggtcacaagaagaaggagcattcacaattgagactcagcc 1270
 DB 843 CCGAGGTATTATTAAAGGACTCAGAGAGAAAAAGCATATTTCAGCTGGTGTCAAG 902
 QY 1271 caggtgcccggctgtggtgagcatccgcaagaagcgtcccgcaactagacaagctg 1330
 DB 903 GCTGTCTTAAGCTTTGGGAAAGCATAGAACAAACGACATGATCAATAAACATG 962
 QY 1331 agccgtccatccgcagattatcaagaaggagcattccgcgaagccaga 1380
 DB 963 GGACGAGCTTTGAGATCTACTNCCAAAGGGAAATTTCTCCAAAGCTTGA 1012

Search completed: November 20, 1999, 21:06:19
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GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on: November 20, 1999, 20:38:59 ; Search time 48.9 Seconds

PT Useful for diagnosis and treatment of cancer
 PS Disclosure: Page 83; 120pp; English.
 CC This cDNA sequence comprises the open reading frame (see also
 CC V38354) and 3' untranslated regions of the newly isolated
 CC ETS gene that codes for a novel human transcription factor (see
 CC W60677) associated with the aetiology of cancers. The ETS gene
 CC is a member of the ETS family and is designated ETS for epithelial
 CC restricted with serine box. The gene is located at chromosome
 CC 1q37, a region amplified in 50% of early breast cancers. ETS is an
 CC early indicator of breast cancer, being expressed at the ductal
 CC carcinoma in situ stage. Dysfunction of the ETS gene that results
 CC in increased expression is indicative of epithelial cancer
 CC (especially breast cancer but also gastric, ovarian and lung
 CC adenocarcinoma) and of unfavourable prognosis. The ETS open
 CC reading frame was deduced from a cDNA clone of foetal liver-spleen
 CC origin that was identified in an expressed sequence tag database
 CC search using human ETS-2, and from a clone obtained by 5' RACE of
 CC placental polyA mRNA. Antibodies, antisense nucleic acids or
 CC inactive ETS mutant proteins that inhibit activity of ETS can be
 CC used to inhibit growth and proliferation of neoplastic cells.
 CC Particularly cancer. ETS polynucleotides, polypeptides and
 CC antibodies are also used to detect ETS, particularly for diagnosis
 CC and monitoring of cancer. ETS polynucleotides may also be used to
 CC detect gross abnormalities in chromosome 1, e.g. for in utero
 CC screening for predisposition to cancer, and to generate ETS protein
 CC in vivo from gene therapy vectors. ETS protein, genes and cDNA can
 CC also be used to screen for specific modulators, especially
 CC potential anticancer agents.
 SO Sequence 1907 BP; 427 A; 557 C; 533 G; 390 T;

Query Match 4.1%; Score 78.2; DB 1; Length 1907;
 Best Local Similarity 59.8%; Pred. No. 1.3e-07;
 Matches 150; Conservative 0; Mismatches 98; Indels 3; Gaps 1;

OY 1159 catcacctgtggcagctctcctcaaggaggttgctactcaagccacagctatggcgcgtt 1218
 DB 911 CACCCAGCTGTGGAGTTCATCCGGACATCTCCACCGGAGCTCAACGAGGCGCT 970
 OY 1219 catctgggtggcccaaggagggagcgtcttcaaaatgtggagctcagccaggttgc 1278
 DB 971 CATGAGTGGGAGAAATCGGACATGAGGCGCTCTCAAGTCTCGCTCGAGGCTGTGC 1030
 OY 1279 ccggctgtgggagcagccagcagcagcgtccgcagctcaagcagcagcagcgtc 1338
 DB 1031 CCAACTATGCGCCCAAAAGAAAGAAAGCAACATGACTCTGAGAAAGCTAGCGGCG 1090
 OY 1339 catccgcccagttatcaagaaggagcattccggaagccagacatctccagcgcctcgt 1398
 DB 1091 CATGAG---GTACTACTACAAACGGGAGATCTGGAACGGGTGGATGGCGCGCACTCGT 1147
 OY 1399 ctaccagttcgt 1409
 DB 1148 CTACAGATTG 1158

RESULT 4
 O55149
 ID O55149 standard: cDNA to mRNA: 2073 BP.
 AC O55149;
 DT 11-JUL-1994 (first entry)
 DE Adenovirus E1A-F gene.
 KW Adenovirus; cancer; ets oncogene; HeLa cell; enhancer core sequence;
 OS methylation; ds.
 FT Human adenovirus.
 FT Key Location/Qualifiers
 FT cds 844..1311
 FT /*tag= a
 FT /note= 'Claimed sequence'
 PR J0532875-A.
 PD 14-DEC-1993.
 PF 02-JUN-1992; 165453.
 PR 02-JUN-1992; JP-165453.

PA (TAKI) TAKARA SHUZO CO LTD.
 DR WPI: 94-021923/03.
 DR P-PSDB: R45451.
 PT Novel E1A-F gene - for production of adenovirus E1A-F and cancer
 PT research
 PS Claim 1; Page 6; 7pp; Japanese.
 CC The adenovirus E1A-F gene contains a 473bp open reading frame. The
 CC clone comprising the coding sequence was isolated by screening
 CC a HeLa cell cDNA library.
 SO Sequence 2073 BP; 458 A; 635 C; 561 G; 418 T;

Query Match 4.1%; Score 78; DB 1; Length 2073;
 Best Local Similarity 76.2%; Pred. No. 1.5e-07;
 Matches 96; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

OY 1250 ttcaaaattggagctacgaccaggtggccggtgtgtggagctccgagaacgtctcc 1309
 DB 961 TTCAAGCTCATTTGAGCTCGAGAGGTCCGCGCTCTGGGCAATCAGAACCGGCCA 1020
 OY 1310 gccatgaactcagcagcagcagcagcagcagcagcagcagcagcagcagcagcagc 1369
 DB 1021 GCCATGAATTTGAGAACACTGAGCGCTCTCGATCTATTATGAGAAAGCATCATG 1080
 OY 1370 cggaaag 1375
 DB 1081 CAGAAAG 1086

RESULT 5
 T37087
 ID T37087 standard: cDNA to mRNA: 2064 BP.
 AC T37087;
 DT 25-APR-1997 (first entry)
 DE E1AF matrix metalloproteinase regulator, cDNA.
 KW E1AF; matrix; metalloproteinase; regulator; infiltration; cancer;
 KW metastasis; cell; control; antisense; decoy; DNA binding region;
 KW target DNA; ribosome; induction; diagnosis; detection; treatment;
 KW mammary cancer; fibrosarcoma; osteosarcoma; lung cancer; ds.
 OS Homo sapiens.
 FT Key Location/Qualifiers
 FT cds 1..1389
 FT /*tag= a

PN W09624379-A1.
 PD 15-AUG-1996.
 PF 09-JAN-1996; J00016.
 PR 08-FEB-1995; JP-020173.
 PA (TAKI) TAKARA SHUZO CO LTD.
 PI Fujinaga K, Higashino F, Yoshida K;
 DR WPI: 96-384227/38.
 DR P-PSDB: W00167.
 PT Control of cancer cell infiltration by E1AF gene expression
 PT regulation - also diagnosis of cancer by detection of E1AF gene
 PT expression products
 PS Example 5; Pages 38-42; 55pp; Japanese.
 CC The present sequence encodes the E1AF protein, which is a matrix
 CC metalloproteinase regulator. The infiltration and metastasis of
 CC cancer cells can be controlled by regulating the expression and
 CC expression products of the E1AF gene. This may be accomplished by
 CC inducing antisense DNA or RNA for the E1AF gene, a decoy gene
 CC expressing the DNA binding region of the E1AF protein, the target
 CC DNA for the DNA binding region of the E1AF protein or ribosomes
 CC corresponding to the E1AF gene mRNA. Cancer can be diagnosed by
 CC detecting E1AF gene expression products, e.g. E1AF protein or mRNA.
 CC These methods may be used in the treatment and diagnosis of cancer,
 CC e.g. mammary cancer, fibrosarcoma, osteosarcoma, lung cancer, etc.
 SO Sequence 2064 BP; 427 A; 648 C; 569 G; 420 T;

Query Match 4.1%; Score 78; DB 1; Length 2064;
 Best Local Similarity 76.2%; Pred. No. 1.5e-07;
 Matches 96; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Matches 114; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

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OY 1163 caccctggcattcctcaagaagtgtctactcaagcccccagctatgcccctcatt 1222
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 368 CACTTATGGGATTCATCCGCACATCCCTTGAACCCAGACAAACCCAGATTATA 329
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 1223 aggtgtctcaacaagaagaaggtcattcaaatgtgaaggtaccgcaagtgccgg 1282
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 328 AATGGGAAGACCGATCTGAGGGCGCTCTTCAAGTCTTGAATCAGAGCGATGCTCAG 269
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 1283 ctgtggggcattccgaagaacccgccgcatgaactcgaacagctgagccgtccalc 1342
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 268 CTATGGGGTAAATAAACAACAACAGACATGACCTATGAAAGCTCAGCCGACCTATG 209
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 1343 gccagattatcaagaagggcct 1365
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 208 AGATTACTACAAAGAGAAAT 186
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

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RESULT 14

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V15529
ID V15529 standard: cDNA; 2975 BP.
AC V15529:
DT 22-MAY-1998 (first entry)
DE Human lymphoid-specific transcription factor NERF-1 cDNA.
KW ets-related; human; lymphoid-specific transcription factor; NERF-1;
OS Homo sapiens.
FH Key Location/Qualifiers
FT CDS 122..1687
    /tag=a
    /product=NERF-1
PN US572113-A.
PD 24-FEB-1998.
PE 03-JAN-1995; 368281.
PR 03-JAN-1995; US-368281.
PA (HUMA-) HUMAN GENOME SCI INC.
PI Kunsch CA, Libermann TA, Oetting JP;
DR WPI: 98-168405/15.
P-PSDB: W47237.
PT NERF-1 and NERF-2 nucleic acids - encode ets-related human
PT lymphoid-specific transcription factors
PS Claim 1; Columns 17-22; 17pp; English.
CC The present sequence encodes the ets-related lymphoid-specific
CC transcription factor NERF-1, which can be used in screening assays
CC for drugs that modulate NERF activity, and to treat patients having
CC need of NERF-1. ets-related factors are involved in, e.g. cancer
CC development, retrovirus replication, T-cell cytokine production,
CC cell cycle effects, growth regulation and cell differentiation.
SQ Sequence 2975 BP; 958 A; 575 C; 614 G; 828 T;

```

Query Match 3.2%; Score 60.4; DB 1; Length 2975;
 Best Local Similarity 53.9%; Pred. No. 0.00056;
 Matches 124; Conservative 0; Mismatches 106; Indels 0; Gaps 0;

```

OY 1151 gggcagcccatccacccgtgtgcaattctcagaagtgctactcaagcccccagctat 1210
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 518 GGAACACAAACCTATTGTTGGAGTTCTTTAGATCTTCAAGATAAATAATCTTGT 577
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 1211 ggcgcctcattagtggtcacaagaagaaggtcattcaaatgtgaaggtaccgccc 1270
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 578 CCCAGGTATATTAAATGACACAGAGAAAAAGCATATTCAAGCTGGTGATTCAAAG 637
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 1271 cagggtgccggctgtggtggcattccgaagaacccgccgcatgaactcgaacaagctg 1330
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 638 GCTGTCTCTAAGCTTTGGGAAACATTAAGAAACACAGACATGAACCTATGAACCATG 697
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 1331 agccgctccatccgcgcagattatacaagaagaaggtcattccggaagccaga 1380
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 698 GGAGGAGCTTTGAGATCTACTACCAAAAGGGGAATTTCTTGCAAAAGTTGA 747
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

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RESULT 15

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V15530
ID V15530 standard: cDNA; 3240 BP.
AC V15530:
DT 22-MAY-1998 (first entry)
DE Human lymphoid-specific transcription factor NERF-2 cDNA.
KW ets-related; human; lymphoid-specific transcription factor; NERF-2;
OS Homo sapiens.
FH Key Location/Qualifiers
FT CDS 207..1952
    /tag=a
    /product=NERF-2
PN US572113-A.
PD 24-FEB-1998.
PE 03-JAN-1995; 368281.
PR 03-JAN-1995; US-368281.
PA (HUMA-) HUMAN GENOME SCI INC.
PI Kunsch CA, Libermann TA, Oetting JP;
DR WPI: 98-168405/15.
P-PSDB: W47238.
PT NERF-1 and NERF-2 nucleic acids - encode ets-related human
PT lymphoid-specific transcription factors
PS Claim 2; Columns 23-28; 17pp; English.
CC The present sequence encodes the ets-related lymphoid-specific
CC transcription factor NERF-2, which can be used in screening assays
CC for drugs that modulate NERF activity, and to treat patients having
CC need of NERF-2. ets-related factors are involved in, e.g. cancer
CC development, retrovirus replication, T-cell cytokine production,
CC cell cycle effects, growth regulation and cell differentiation.
SQ Sequence 3240 BP; 1070 A; 592 C; 662 G; 916 T;

```

Query Match 3.2%; Score 60.4; DB 1; Length 3240;
 Best Local Similarity 53.9%; Pred. No. 0.00057;
 Matches 124; Conservative 0; Mismatches 106; Indels 0; Gaps 0;

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OY 1151 gggcagcccatccacccgtgtgcaattctcagaagtgctactcaagcccccagctat 1210
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 783 GGAACACAAACCTATTGTTGGAGTTCTTTAGATCTTCAAGATAAATAATCTTGT 842
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 1211 ggcgcctcattagtggtcacaagaagaaggtcattcaaatgtgaaggtaccgccc 1270
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 843 CCCAGGTATATTAAATGACACAGAGAAAAAGCATATTCAAGCTGGTGATTCAAAG 902
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 1271 cagggtgccggctgtggtggcattccgaagaacccgccgcatgaactcgaacaagctg 1330
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 903 GCTGTCTCTAAGCTTTGGGAAAGCATTAAGAAACACAGACATGAACCTATGAACCATG 962
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 1331 agccgctccatccgcgcagattatacaagaagaaggtcattccggaagccaga 1380
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 963 GGAGGAGCTTTGAGATCTACTACCAAAAGGGGAATTTCTTGCAAAAGTTGA 1012
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

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